

This listing of claims replaces all prior versions, and listings of claims in the instant application:

Listing of Claims:

1. (Currently Amended) A computer-based method comprising:

receiving a request for data having a target data format;

retrieving, from a filter registry in response to said request, a rule set for a plurality of partial filter adapters wherein, upon being chained together said plurality of partial filter adapters converts source data to said data wherein said source data has a source data format; and further wherein each of said plurality of partial filter adapters has a different underlying data input format and a different underlying data output format; and

building a filter using said rule set wherein said filter comprises a chain of said plurality of partial filter adapters wherein each partial filter adapter includes a generic source and target data formats independent interface and said generic source and target data formats independent interface is ~~used in passing for receiving input data by from one each~~ partial filter adapter ~~in said plurality of partial filter adapters to another partial filter adapter in said plurality of partial filter adapters independent of an underlying data format of said input data~~; and

processing a subset of the source data by said filter to produce said data.

2. (Cancelled)

3. (Currently Amended) A computer-based method comprising:

receiving a request, from a device, for data ~~from a device~~;

determining data formats supported by said device wherein said data formats includes at least two data formats including at least a second data format and a third data format;

selecting said second data format for a format of said data wherein said second data format is a target data format;

retrieving, from a filter registry in response to said request, a rule set for a plurality of partial filter adapters wherein, after being chained together said plurality of partial filter adapters can be used to convert source data having a first data format to said data having said second data format wherein said first data format is a source data format; and further wherein each of said plurality of partial filter adapters has a different underlying data input format and a different underlying data output format; and

building a filter using said rule set wherein said filter comprises a chain of said plurality of partial filter adapters wherein each partial filter adapter includes a generic source and target data formats independent interface and said source and target data formats independent interface is used in passing for receiving input data by from one each partial filter adapter ~~in said plurality of partial filter adapters to another partial filter adapter in said plurality of partial filter adapters independent of an underlying data format of said input data~~ wherein said filter converts said source data from a said first data format to said second data format.

4. (Cancelled)

5. (Previously Presented) A method according to Claim 3, wherein said selecting said second data format further comprises:

using a selection scheme including at least one of the following criterion: storage space required by said data in each of said at least two data formats supported by said device; conversion time for said data from said first data format into each of said at least two data formats supported by said device; and a quality for each of said at least two data formats.

6. (Cancelled)

7. (Currently Amended) The method of Claim 1 wherein said generic source and target data formats independent interface is a Simple API for XML interface.

8. (Currently Amended) A computer-based method comprising:

receiving a request for data having a target data format;

retrieving, from a filter registry in response to said request, a rule set for a plurality of partial filter adapters wherein after being chained together said plurality of partial filter adapters can be used to convert source data to said data wherein said source data has a source data format; and

building a filter using said rule set wherein said filter comprises a chain of said plurality of partial filter adapters wherein each partial filter adapter includes a generic source and target data formats independent interface and said generic source and target

data formats independent interface is used in passing for receiving input data by from one each partial filter adapter in said plurality of partial filter adapters to another partial filter adapter in said plurality of partial filter adapters independent of an underlying data format of said input data wherein each partial filter adapter in said plurality of partial filter adapters comprises a general partial filter adapter having functionality determined by a parameter and further wherein said functionality includes each of said plurality of partial filter adapters having a different underlying data input format and a different underlying data output format.

9. (Original) The method of Claim 8 wherein said general partial filter adapter comprises an eXtensible Style sheet Language Transformation processor, and said parameter comprises an eXtensible Style sheet Language Transformation script.

10. (Currently Amended) A computer program product comprising a medium configured to store or transport computer readable code for a method comprising:

receiving a request for data having a target data format;

retrieving, from a filter registry in response to said request, a rule set for a plurality of partial filter adapters wherein, upon being chained together said plurality of partial filter adapters converts source data to said data wherein said source data has a source data format; and further wherein each of said plurality of partial filter adapters has a different underlying data input format and a different underlying data output format; and

building a filter using said rule set wherein said filter comprises a chain of said plurality of partial filter adapters wherein each partial filter adapter includes a generic source and target data formats independent interface and said generic source and target data formats independent interface is ~~used in passing for receiving input data by from one each~~ partial filter adapter ~~in said plurality of partial filter adapters to another partial filter adapter in said plurality of partial filter adapters independent of an underlying data format of said input data;~~ and

processing a subset of the source data by said filter to produce said data.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) A computer-based method comprising:

receiving a request for data having a first format from a process requiring data in one of at least two data formats including at least a second format and a third format wherein said first data format is a source data format;

selecting said second format wherein said second data format is a target data format;

retrieving, from a filter registry in response to said request, a rule set for a plurality of partial filter adapters wherein, after being chained together said plurality of partial filter adapters can be used to convert said data from said first format to said second format; and further wherein each of said plurality of partial filter adapters has a different underlying data

input format and a different underlying data output format; and

building a filter using said rule set wherein said filter comprises a chain of said plurality of partial filter adapters wherein each partial filter adapter includes a generic source and target data formats independent interface and said generic source and target data formats independent interface is used in passing for receiving input data by from one each partial filter adapter ~~in said plurality of partial filter adapters to another partial filter adapter in said plurality of partial filter adapters independent of an underlying data format of said input data.~~

14. (Cancelled)

15. (Previously Presented) A method according to Claim 13, wherein said selecting said second data format further comprises:

using a selection scheme including at least one of the following criterion: storage space required by said data in each of said at least two data formats supported by said process; conversion time for said data from said first data format into each of said at least two data formats supported by said process; and a quality for each of said at least two data formats.

16. (Original) The method of Claim 13 further comprising:

converting said data in said first format to data in said second format using said filter.

17. (Currently Amended) The method of Claim 13 wherein said generic source and target data formats independent interface is a Simple API for XML interface

18. (Currently Amended) A computer-based method comprising:

receiving a request for data having a first format from a process requiring data in a second format wherein said first format is a source data format and said second format is a target data format;

retrieving, from a filter registry in response to said request, a rule set for a plurality of partial filter adapters wherein after being chained together said plurality of partial filter adapters can be used to convert said data from said first format to said second format; and

building a filter using said rule set wherein said filter comprises a chain of said plurality of partial filter adapters wherein each partial filter adapter includes a generic source and target data formats independent interface and said generic source and target data formats independent interface is used in passing for receiving input data by from one each partial filter adapter ~~in said plurality of partial filter adapters to another partial filter adapter in said plurality of partial filter adapters independent of an underlying data format of said input data~~ wherein each partial filter adapter in said plurality of partial filter adapters comprises a general partial filter adapter having functionality determined by a parameter and further wherein said functionality includes each of said plurality of partial filter adapters having a different underlying data input format and a different underlying data output format.

19. (Original) The method of Claim 18 wherein said general partial filter adapter comprises an eXtensible Style sheet Language Transformation processor, and said parameter comprises an eXtensible Style sheet Language Transformation script.

20. (Currently Amended) A structure comprising:
a memory including a partial filter adapter library;
and a partial filter adapter registry wherein said partial filter adapter registry includes a rule set; and
a filter server, coupled to said partial filter adapter registry and to said partial filter adapter library, comprising:
a conversion service;
a protocol reader coupled to said conversion service wherein said conversion service sets up said protocol reader to determine a source data format;
a chain factory coupled to said conversion service, wherein said conversion service calls said chain factory with at least said source data format and a target data format;
a service manager coupled to said chain factory and to said partial filter adapter library; and
a filter registry service coupled to said chain factory and to said partial filter adapter registry wherein said filter ~~server~~ registry service ~~uses said rule set~~ finds a chain of partial filter adapters wherein each partial filter adapter in said chain has a different underlying data input format and a different underlying data output format; said service manager instantiates said each partial filter adapter in said chain; and said chain factory connects said instantiated partial filter adapters to build a

~~filter using a plurality of partial filter adapters
from said partial filter adapter library.~~

21. (Currently Amended) A structure comprising:
a processor; and
a memory coupled to said processor and having stored
therein computer program instructions wherein execution of
said computer program instructions on said processor
generates a method comprising:

receiving a request for data from a device;
determining data formats supported by said
device wherein said data formats includes at least
two data formats including at least a second data
format and a third data format;

selecting said second data format for a format
of said data wherein said second data format is a
target data format;

retrieving, from a filter registry in response
to said request, a rule set for a plurality of
partial filter adapters wherein, after being chained
together said plurality of partial filter adapters
can be used to convert source data having a first
data format to said data having said second data
format wherein said first data format is a source
data format; and further wherein each of said
plurality of partial filter adapters has a different
underlying data input format and a different
underlying data output format;; and

building a filter using said rule set wherein
said filter comprises a chain of said plurality of
partial filter adapters wherein each partial filter
adapter includes a generic source and target data
formats independent interface and said generic source
and target data formats independent interface is used

~~in passing for receiving input data by from one each~~
~~partial filter adapter in said plurality of partial~~
~~filter adapters to another partial filter adapter in~~
~~said plurality of partial filter adapters independent~~
~~of an underlying data format of said input data~~
wherein said filter converts said source data from a
said first data format to said second data format.

22. (Currently Amended) The structure of Claim 21
wherein said generic source and target data formats
independent interface is a simple API for XML interface.

23. (Original) The structure of Claim 22 wherein
said simple API for XML interface is a XML document
handler interface.

24. (Currently Amended) A method for rendering
accessible data stored in a first data format in a first
computer system for a second computer system supporting a
second data format, said method comprising:

receiving in said first computer system a request
from said second computer system for said data;

receiving in said first computer system information
about at least one data format supported by said second
computer system;

selecting said second data format, if said first
computer system was informed about more than one data
format supported by said second computer system;

comparing in said first computer system said first
data format with said second data format,

generating a filter for converting said data from
said first data format into said second data format, ~~if~~
upon said comparing finding said first data format is
incompatible with said second data format, by combining a

first partial filter adapter to a second partial adapter for the transformation of data wherein each of said first and second partial filter adapters includes a generic source and target data formats independent interface and said generic source and target data formats independent interface is for receiving input data by said first and second partial filter adapters independent of an underlying data format of said input data; and

converting said data in said first computer system, using said filter, from said first data format into said second data format.